

wide domains of unreason, upon which we all trespass during our earthly journeyings, and where many of us, I am afraid, almost permanently reside.

STUDIES OF THE NORTH AMERICAN PROCTOTRUPIDÆ, WITH DESCRIPTIONS OF NEW SPECIES FROM FLORIDA.

BY WILLIAM H. ASHMEAD, JACKSONVILLE, FLORIDA.

Sub family PLATYGASTERINÆ.

In this second paper on the North American *Proctotrupidæ*, I have taken up the sub-family *Platygasterinæ*, comprising, for the most part, small black species, all parasitic in larvæ belonging to the Dipterous families *Cecidomyiidae* and *Tipulidae*.

It will be seen that I have recognized in our fauna species in all of the described genera but *Iphetrachelus* Haliday, and one new genus parasitic on *Cecidomyious* hickory galls.

XLVI. *Iphetrachelus* Haliday.

XLVII. *Allotropa* Foerster.

74 (1). *Allotropa Americana*, n. sp.

♂. Length, .07 inch. Black, sub-opaque, finely punctate, scape and legs pale brown. Antennæ 9-jointed, terminating in a 4-jointed club, joints serrate, flagellum and club dark brown. Mesothorax with two grooves. Scutellum convex, rounded posteriorly. Abdomen black polished, first and second segments striate, the second segment greatly lengthened. Wings hyaline.

Hab.—Florida.

XLVIII. *Metaclisis* Foerster.

75 (1). *Metaclisis belonocnemæ*, n. sp.

♀. Length, .07 inch. Black, finely punctate. The 10-jointed antennæ and legs pale brown. Thorax with two grooves. Wings hyaline.

Hab.—Florida.

Described from one specimen, reared in April, 1883, from galls. *Belonocnema Tretæ* Mayr, probably parasitic on a *Cecidomyious* guest fly inhabiting this gall.

XLIX. *Monocrita* Foerster.76 (1). *Monocrita melanostropha*, n. sp.

♀. Length, .08 inch. Black, sub-opaque, finely punctate, middle of mesothorax and the somewhat flattened scutellum, polished. Antennæ entirely black, terminal joint one-third longer than the preceding joint. Mesothorax with two grooves. Legs red, the femora obfuscated or blackish. Abdomen polished black. Wings hyaline, submarginal vein black.

Hab.—Florida.

77 (2). *Monocrita Canadensis*, n. sp.

♀. Length, .14 inch. Black, head and prothorax finely punctate. Antennæ 10-jointed, filiform antennæ with the legs are pale brownish yellow. Thorax with two deep grooves, converging and almost meeting posteriorly. Scutellum slightly convex, punctate, pubescent, separated from the thorax by a deep depression. Wings fuscous.

Hab.—Canada. Kindly given me by Mr. W. H. Harrington.

L. *Isostasius* Foerster.78 (1). *Isostasius musculus*, n. sp.

♀. Length, .04 inch. Black, polished. Ocelli distant from inner border of eye. Antennæ 10-jointed, black, club 4-jointed, the joints broader than long. Thorax without grooves. Legs black, femora at base and tarsi reddish. Abdomen ovate, not quite as long as the thorax, and but slightly compressed from above. Wings hyaline, submarginal vein black; no other veins.

Hab.—Florida.

LI. *Inostemma* Haliday.79 (1). *Inostemma Horni*, n. sp.

♂, ♀. Length, .06 to .07 inch. Black, sub-opaque, microscopically punctate. Antennæ 10-jointed, entirely black. The horn in female is prolonged over the thorax, extending to base of ocelli, gradually narrowed at base. Legs black, tarsi pale brown, in some specimens the tibiæ are pale at tips. Abdomen acuminate ovate, longer than head and thorax combined. Wings hyaline, submarginal vein black. The male is without the projecting horn, and is difficult to distinguish from other species in this group, the shape of the abdomen, which is acuminate ovate, less depressed than any others, and the basal ocelli, which are contiguous to the

inner border of the eye, must be depended upon to separate it. The mesothorax has two delicate grooves.

Hab.—Florida.

This species is dedicated to my friend, Dr. Geo. H. Horn, the distinguished American Coleopterist. It is at once distinguished from the European *Inostemma Bosci* by its stouter form, shorter horn; in that species the horn projects over the entire head; and by its differently colored legs.

80 (2). *Inostemma Cressoni*, n. sp.

♀. Length, .09 to .10 inch. Robust, black, finely punctate. It is at once distinguished from *I. Horni* by its larger, more robust form, its much stouter horn, which is of a uniform thickness throughout, not narrowed at base, and by having rufous colored tibiae and tarsi.

Hab.—Florida.

Described from two specimens and dedicated to my friend, the learned American Hymenopterist, Mr. E. T. Cresson.

81 (3). *Inostemma Rileyi*, n. sp.

♂, ♀. Length, .04 inch. Black, polished. This species is at once distinguished from all others by its much smaller size, rufous colored femora and tibiae, sometimes obfuscated in the middle, and the horn in female extends only to the base of the head.

Described from ten specimens, and dedicated to my friend, the eminent economic Entomologist, who so ably fills the position of U. S. Entomologist, Dr. C. V. Riley.

82 (4). *Inostemma Packardi*, n. sp.

♀. Length, .07 inch. This species is at once distinguished from the others by the brevity of its horn, which reaches only slightly beyond the middle of the thorax and obliquely truncate at tip, not rounded as are the tips in the other species. Head and pleurae punctate. Antennae black, scape reddish at base. Legs red, coxae at base black. Wings hyaline, submarginal vein black.

Hab.—Florida.

Described from one specimen, and dedicated to my learned friend, Prof. A. S. Packard, from the study of whose excellent work, "Guide to the Study of Insects," I early derived so much benefit and imbibed some of my love for the study of insects.

LII. *Acerota* Foerster.

83 (1). *Acerota opaca* Prov. Add. et Corr. a la Faune Hym., p. 184.
Hab.—Canada.

84 (2). *Acerota caryæ*, n. sp.

♂, ♀. Length, .07 to .09 inch. Black, shining, microscopically punctate. Antennæ and legs pale yellowish-brown. The four-jointed antennal club is black or brown, in the male the antennæ are generally uniform yellow-brown. The mesothorax has two faint grooves on its disk; scutellum prominent, slightly pubescent. Abdomen smooth, polished. Wings hyaline.

Hab.—Florida.

85 (3). *Acerota Floridana*, n. sp.

♀. Length, .07 inch. Black, antennæ and legs dark red; two grooves on mesothorax; scutellum sparsely pubescent; metathorax with denser, longer, white pubescence. Wings hyaline.

Hab.—Florida.

LIII. *Catillus* Foerster.

86 (1). *Catillus maculipes*, n. sp.

♀. Length, .03 inch. Black, polished. Antennæ and legs rufous, femora and tibiæ with dark blotches above. Mesonotum without grooves. Wings hyaline.

Hab.—Florida.

LIV. *Xestonotus* Foerster.

87 (1). *Xestonotus andriciphilus*, n. sp.

Female. Length, .07 inch. Black; face finely punctate. Antennæ and legs brownish-yellow. Mesothorax with two sharply defined, parallel grooves. Scutellum not greatly prolonged, but compressed at sides. Wings hyaline.

Hab.—Florida.

Described from one specimen reared from the Cynipidous gall, *Andricus blastophagus* Ashm.

LV. *Amblyaspis* Foerster.

88 (1). *Amblyaspis longipes*, n. sp.

Male. Length, .08 inch. Form somewhat slender, black. Antennæ and the unusually long legs pale yellowish brown; flagellum darker, the

last joint being twice as long as preceding joint, cylindrical, the others narrowed at base. The scutellum is very long, acute, elevated over the metathorax. Metathorax covered with white pubescence. Wings hyaline.

Hab.—Florida.

This species bears a close resemblance to *Amblyaspis aliens* Nees, but the scutellum is longer and more acute.

89 (2). *Amblyaspis Americana*, n. sp.

Female. Length, .04 inch. Black. Antennæ and legs pale brown, posterior femora and tibiæ obfuscated toward tips. The apex of the long scutellum is yellowish, and the hyaline wings have their borders strongly ciliate, differing in this respect from all other species in my collection.

Hab.—Florida.

LVI. *Leptacis*, Foerster.

90 (1). *Leptacis cynipsiphila*, n. sp.

Male and female. Length, .05 to .07 inch. Black. Head in front finely punctate. Antennæ and legs rufous. Antennal club 4-jointed, dusky. Thorax sparsely, metathorax densely covered with white pile. Scutellum with a small acute projecting spine at tip. Wings hyaline, strongly pubescent.

Hab.—Florida. Described from specimens reared from an oak gall.

LVII. *Isorhombus*, Foerster.

91 (1). *Isorhombus hyalinipennis*, n. sp.

Female. Length, .05 inch. Black. Antennæ and legs pale brown; the three-jointed club which distinguishes this genus from *Leptacis*, is black or dark brown. The mesothorax is without grooves, the scutellum slightly pubescent, unarmed. Wings hyaline, almost devoid of pubescence.

Hab.—Florida.

LVIII. *Epimeces*, Westwood.

(= *Ectadius*, Foerst.)

92 (1). *Epimeces Americanus*, n. sp.

Male and female. Length, .04 to .07 inch. Slender, black, shining. The filiform antennæ and legs are dark rufous. Mesothorax with two grooves. Abdomen narrow, elongate, sub-cylindrical, gradually narrowed towards tip, about one-third longer than head and thorax combined. Wings hyaline.

Hab.—Florida.

This species is very much smaller than *Epimeces subulatus* Nees, which it closely resembles. The genus *Ectadius* Foerster seems, without doubt, to be identical with this genus, as I have indicated.

LIX. *Sactogaster*, Foerster.

93 (1). *Sactogaster anomaliventris*, n. sp.

Female. Length, .03 to .05 inch. Black, polished. Antennæ and legs black; tarsi reddish. The joints of the four-jointed antennal club are broader than long. Mesoscutum smooth, without grooves. Scutellum armed with a small acute spine. The second abdominal segment is inflated below, having the appearance of a small globe; the other segments are narrow, cylindrical, and project beyond it in the form of a tail. Wings hyaline.

Hab.—Florida.

LX. *Synopeas*, Foerster.

94 (1). *Synopeas melanocera*, n. sp.

Female. Length, .10 inch. Black, polished. Face, just above insertion of antennæ, grooved, and thence to ocelli finely punctate. Antennæ filiform, black, the terminal joint longer than the preceding. Mesothorax with two grooves. Scutellum with a small spine near tip. Legs dark red. Abdomen as long as head and thorax combined. Wings hyaline.

Hab.—Florida.

LXI. *Anopedias*, Foerster.

95 (1). *Anopedias incertus*, n. sp.

Female. Length, .06 inch. Somewhat robust, black. Antennæ and legs rufous, thighs obfuscated. Antennal club 4-jointed, brown-black. Thorax without grooves. Scutellum flattened, with a spine at tip. Mesopleuræ highly polished; metapleuræ and metathorax densely pubescent. Wings hyaline.

Hab.—Florida.

The structural characters of this species seem to agree with the definition of this genus, but I have doubts as to its belonging here.

LXII. *Isocybus*, Foerster.

96 (1). *Isocybus longiventris*, n. sp.

Female. Length, .04 inch. Black, highly polished. Head large, cubical. Antennæ and legs pale yellowish-brown. Thorax rather short,

much narrower than head, smooth. Abdomen long, acuminate ovate, nearly twice as long as head and thorax combined. Wings hyaline.

Hab.—Florida.

This species is placed in this genus only provisionally, as the non-grooved thorax and shape of abdomen will probably exclude it from the genus.

LXIII. *Trichacis*, Foerster.

97 (1). *Trichacis brunneipes*, n. sp.

Female. Length, .10 inch. A slender, elongate, polished, black species. Antennæ and legs pale yellowish-brown, flagellum and club rust-brown. Mesothorax with two parallel grooves. Scutellum, which is transversely convex, is well separated from thorax by a deep depression, and has a thick tuft of grey pubescence at tip. Metapleuræ densely pubescent. Wings dusky hyaline.

Hab.—Florida.

LXIV. *Hypocampsis*, Foerster.

98 (1). *Hypocampsis Pluto*, n. sp.

Female. Length, .06 inch. This species is highly polished, including antennæ and legs, entirely black. Mesothorax with two grooves. Scutellum rounded, highly convex. Abdomen with the lateral carina broad and turned downwards. Wings hyaline.

Hab.—Florida.

LXV. *Polygnotus*, Foerster.

99 (1). *Polygnotus solidaginis*, n. sp.

Male and female. Length, .05 to .07 inch. Black polished. Antennæ dark reddish-brown, scape paler; club, female, five-jointed; male antennæ filiform. Legs dark red, femora black, tibiæ obfuscated. Mesothorax smooth, without grooves. Scutellum elevated, highly convex, more than twice as broad as long, and separated from mesothorax by a deep transverse groove. Wings hyaline.

Hab.—Florida.

Described from numerous specimens reared from a Cecidomyious gall (*Cecidomyia nebulosa* Ashm. MSS.) From six to eight specimens were reared from each fly; they make parchment-like cocoons, placed side by side, as illustrated by Prof. Westwood on the genus *Platygaster*, "Introd. to Study of Insects," vol. ii., f. 78, No. 14.

100 (2). *Polygnotus baccharicola*, n. sp.

Male and female. Length, .03 to .06 inch. Black, polished. Differs from the above species in its smaller size, more slender form and in having uniformly colored dark red legs. The femora are not black.

Hab.—Florida.

Described from numerous specimens reared from a Cecidomyious gall (*Cecidomyia baccharicola* Ashm. MSS.)

LXVI. *Platygaster*, Latreille.

101 (1). *Platygaster pallipes* Say, Leconte's Ed. Say's Works, I., p. 383. Hab.—Indiana.

102 (2). *Platygaster Canadensis* Prov. Add. et Corr. a la Faune Hym., p. 181. Hab.—Canada.

103 (3). *Platygaster error* Fitch. Sixth Rep. N. Y. State Agr. Soc., p. 818. Hab.—New York.

104 (4). *Platygaster Herricki* Packard. Third Rep. U. S. Ent. Comm., p. 220. Hab.—Western States.

105 (5). *Platygaster Floridensis*, n. sp.

Female. Length, .06 to .07 inch. Black, polished, more slender than *Platygaster niger* Nees. Antennæ and legs of a uniform pale yellowish-brown. Mesothorax smooth. The scutellum is convex, broader than long, and is not separated from the mesothorax by a deep transverse groove, as are the species in the genus *Polygnotus*, sparsely pubescent towards tip. Wings hyaline.

Hab.—Florida.

106 (6). *Platygaster gracilis*, n. sp.

Male. Length, .05 inch. Very slender, polished black. Antennæ filiform, black, scape at base pale brown. Legs reddish, femora obfuscated. Wings hyaline.

Hab.—Florida.

The new genus recognized in this family will be described in another paper, when I hope to be able to give a good illustration of its peculiar characters.